

Notice of Allowability

Application No.

10/671,364

Applicant(s)

DATE, ATSUSHI

Examiner

Pawandeep S. Dhingra

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/24/2003.
2. ☒ The allowed claim(s) is/are 1-11 and 13.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


TWYLER LAMB
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

The following changes to the drawings have been approved by the examiner and agreed upon by applicant:

Figure 13 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated (see "description of related art" in applicant's disclosure, where applicant admits figure 13 as a conventional system). See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In order to avoid abandonment of the application, applicant must make these above agreed upon drawing changes.

The application has been amended as follows:

Claim 12, has been cancelled.

Claim 13, has been amended as follows: ~~A storage medium in which the program according to claim 11 is stored so as to be readable by a computer.~~ "A computer readable medium storing a computer program, which when executed by a computer, causes the computer to perform the method of claim 11".

Authorization for the above examiner's amendment was given in a telephone interview with Sivon Kalminov (Telephone: 949-932-3329) on September 27, 2007.

Allowable Subject Matter

1. The following is an examiner's statement of reasons for allowance:

The invention is directed to an apparatus and method for an image-forming controller, which reads an image data containing the same tile (plurality of rectangular images), four times with a delay corresponding to a delay of image formation between image forming sections of the printer, and sequentially transferring the image data to four image forming sections corresponding to the predetermined color components (CMYK). Claims 1 and 11 identify the uniquely distinct features of "transferring means for reading identical rectangular image data predetermined multiple times...and for sequentially transferring the read identical rectangular image data to the rectangle-raster converting means...and outputting the pieces of raster image data to the corresponding image forming sections for the predetermined color components" (claims 1 & 9). The closest prior arts, Utsunomiya, US 2001/0033392, Kajiwara, US 2002/0061140, and Rijavec, US 2003/0090709 teach dividing the image data into tiles (rectangular image data), and

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converting an image's RGB color space (color components) into CMYK color space (predetermined color components) and generating respective plurality of pieces of rectangular image data for the predetermined color components; storing means for storing the plurality of converted rectangular image data; converting the generated plurality of pieces of rectangular image data into raster image data for the predetermined color components.

Either singularly or in combination with other cited references fails to anticipate or render the above underlined limitations obvious.

The prior arts, Utsunomiya, US 2001/0033392, Kajiwara, US 2002/0061140, and Rijavec, US 2003/0090709 disclose transfer means for sequentially transferring the contents of each desired packet data (header and image data) or number of pieces of rectangular image data to the image processing sections, and then performing image processing on said data including converting the color space components (RGB) of the image data into predetermined color space components (CMYK), enhancing image quality and performing various other image processing techniques BUT does not disclose transferring the identical rectangular image data predetermined multiple times (which is interpreted by the examiner as transferring/reading the exact same data four times (predetermined multiple times)) and sequentially transferring the read identical rectangular image data to the rectangle-raster converting means, and outputting the pieces of raster image data to the corresponding image forming sections for the predetermined color components.

Suzuki et al., US 2003/0151759 discloses relevant subject matter of the present application but the filing date of Suzuki does not overcome the foreign priority date of present applicant (09/30/2002), and the examiner was not able to use the teachings disclosed by the Suzuki reference.

The meaning of the sentences "transferring means for reading identical rectangular image data predetermined multiple times...and for sequentially transferring the read identical rectangular image data to the rectangle-raster converting means...and outputting the pieces of raster image data to the corresponding image forming sections for the predetermined color components" is demonstrated by applicant's drawings (figures 8-11), and specification.

2. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

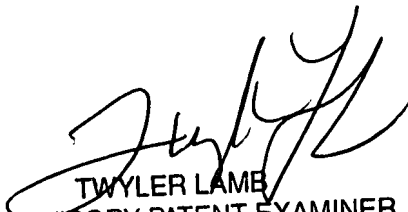
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pawandeep S. Dhingra whose telephone number is 571-270-1231. The examiner can normally be reached on M-F, 9:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Lamb can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ld

TWYLER LAMB
SUPERVISORY PATENT EXAMINER

Pd

September 27, 2007